

RESONATOR, FILTER, OSCILLATOR, DUPLEXER,  
AND COMMUNICATION APPARATUS

ABSTRACT OF THE DISCLOSURE

5           A resonator, a filter, an oscillator, a duplexer, and a communication apparatus  
employing these devices have improved efficiency characteristics in confining an  
electromagnetic field in an opening of an electrode, suppressed current concentration,  
and minimized conductor loss. Electrode patterns are formed near short-circuited  
positions in a slot so that the slot will be divided into smaller-width slot lines.  
10       Consequently, the efficiency in confining the electromagnetic field is improved, and  
conductor loss is minimized.